

LISTING OF CLAIMS

1(currently amended). An electrically conductive article treated by an electroless method comprising:

contacting at least a portion of the surface with a medium comprising water, at least one dopant, silica and at least one silicate and having a basic pH and wherein said medium is substantially free of chromates thereby forming a silica containing film,

drying the substrate,

applying a coating selected from the group consisting of latexes, silanes, epoxies, silicone, amines, alkyds, urethanes, polyesters and acrylics.

2(cancelled).

3(cancelled).

4(currently amended). The article of Claim 2 wherein the silicate comprises medium comprises water, sodium silicate and colloidal silica.

5(original). The article of Claim 1 wherein the surface comprises at least one member selected from the group consisting of copper, nickel, tin, iron, zinc, aluminum, magnesium, stainless steel and steel and alloys thereof.

6(cancelled).

7(previously presented). The article of Claim 1 wherein the medium comprises at least one dopant selected from the group consisting of zinc, cobalt, molybdenum and nickel.

8(previously presented). The article of Claim 1 wherein said drying is conducted at a temperature of at least about 120C.

9(cancelled).

10(previously presented). The article of Claim 2 wherein the medium comprises a combination comprising water, colloidal silica, greater than about 1 wt.% of sodium silicate and further comprises at least one dopant selected from the group consisting of cobalt, nickel and molybdenum and zinc.

11(cancelled)

12(previously presented). The article of Claim 2 wherein said dopant comprises at least one member selected from the group consisting of titanium chloride, tin chloride, zirconium acetate, zirconium oxychloride, calcium fluoride, tin fluoride, titanium fluoride, zirconium fluoride; ammonium fluorosilicate, aluminum nitrate; magnesium sulphate, sodium sulphate, zinc sulphate, copper sulphate; lithium acetate, lithium bicarbonate, lithium citrate, lithium metaborate, lithium vanadate and lithium tungstate.

13(currently amended). The article of Claim 1 ~~wherein said medium comprises sodium silicate, water, colloidal silica and at least one dopant, and subsequent to said drying rinsing with a second medium comprising water and at least one member selected from the group consisting of silanes and colloidal silica~~ and wherein said coating comprises at least one epoxy.

14(previously presented). The article of Claim 1 further comprising subsequent to said drying, rinsing said surface with a solution comprising water and at least one dopant.

15(previously presented). The article of Claim 14 wherein the dopant comprises at least one member selected from the group consisting of molybdenum, chromium, titanium, zircon, vanadium, phosphorus, aluminum, iron, boron, bismuth, gallium, tellurium, germanium, antimony, niobium, magnesium, manganese, zinc, aluminum, cobalt, nickel and their oxides and salts.

16(previously presented). The article of Claim 1 further comprising prior to said contacting pretreating said surface with at least one member selected from the group consisting of acid and basic cleaners.

17(cancelled).

18(previously presented). The article of Claim 1 wherein said coating comprises at least one silane.

19(currently amended). An article ~~comprising an electrically conductive substrate comprising zinc or a zinc alloy~~ wherein at least a portion of the substrate ~~[[which]] has a silicate and an inorganic silica containing layer and chromate free surface~~ and at least one composition adhered to said surface layer and wherein said layer contains about 0wt.% chromate and said article when tested in accordance to ASTM B177 passes at least 72 hours before the formation of white rust.

20(previously presented). The article of Claim 1 wherein said medium further comprises at least one reducing agent selected from the group consisting of sodium borohydride and hypophosphide.

21(previously presented) The article of Claim 1 wherein the medium has a temperature of greater than about 50C.

22(previously presented). The article of Claim 19 wherein the adhered composition comprises at least one epoxy.

23(cancelled).

24(new). An article comprising a zinc or a zinc alloy substrate and a layer upon the substrate consisting essentially of at least one silicate, silica and at least one member selected from the group consisting of nickel, molybdenum, cobalt, magnesium and aluminum, wherein said layer is substantially free of chromates; and at least one composition adhered to said layer.

25(new). The article of Claim 24 wherein the at least one member is selected from the group consisting of nickel, cobalt and molybdenum.

26(new). The article of Claim 24 wherein said layer contains about 0wt.% chromates.